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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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JOSEPH M POTENZA
BANNER & WITCOFF
1001 G STREET NW
WASHINGTON, DC 200014597

EXAMINER	
TRAN, HAI V	

ART UNIT	PAPER NUMBER
2611	18

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	08/932,543	KAWAKURA ET AL.	
	Examiner	Art Unit	
	Hai Tran	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) 1-4,9 and 14 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 5-8,10-13 and 15-18 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments, see Paper 15, filed on June 23,2003, with respect to the rejection(s)of claim(s) 5-8, 10-13 and 15-18 under 35 USC 103(a) over Prior Art of record have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 5, 7, 10, 12, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant 's Admitted Prior Art (Fig. 1; Specification page 2, lines 18-page 4, lines 5) in view of Pinder et al.(US 6,105,134) and further in view of Oka (US 5,537,591).

Regarding claim 5, Admitted Prior Art (Fig. 1) discloses an information utilization apparatus comprising:

A memory 1002 configured to store a delivered piece of information including encoded data; A verification unit 2004 configured to verify whether the applicable

data included in the delivered piece of information in the memory has been authorized; A decoding unit 2006 configures to decode the encoded data stored in the memory 1002; A plurality of independently operated Processing unit 2008, 2010 and 2012 arranged respectively corresponding to the decoding unit 2006 and configured to execute different operations on the data decoded by the decoding unit 2006; A judging unit (within a verification unit 2004) configured to judge if the encoded data is authorized to be used in response to a request for an operation; and An operation command issuing unit (within a verification unit 2004) configured to issue a command responding to a request for the operation to a decoding unit if the judging unit judges authorizes use of the encoded data according to the verified applicable authorization data (Applicant's specification page 2, lines 18-page 4, lines 5).

Admitted Prior Art do not clearly disclose a delivered piece of information including applicable time data defining time period authorizing use of the encoded data in which the verification unit 2004 configured to verify whether the applicable time data included in the delivered piece of information in the memory has been falsified and the judging unit (within a verification unit 2004) configured to judge if a current time is in the time period of authorizing use of the encoded data according to the verified applicable time authorization data.

Pinder discloses a memory (Fig. 13; Memory 1207, ROM 1219 and non-volatile memory "NVM" 1209 Col. 21, lines 60-Col. 22, lines 11 and Fig. 19; Col. 33, lines 40-45) stores a delivered piece of encoded data and applicable time data defining

time period authorizing use of the encoded data; a verification unit (Fig. 1, element 119 and Fig. 3, DHCT) verifies whether the encoded broadcast signal with embedded time data has been altered/falsified within the Global Broadcast Authenticated Message "GBAM" Fig. 18-20 in which the GBAM are hashed by one-way hash function; (Col. 5, lines 54-56; Col. 9, lines 43-55; Col. 32, lines 60-Col. 33, lines 7 and lines 38-45; Col. 35, lines 28-45 and Col. 47, lines 8-60) and a judging unit (DHCTSE 627 within the DHCT Fig. 3,4, 6 element 333) judges if the current time is in the time period authorizing use of the encoded data (Col. 33, lines 42-44 and Col. 40, lines 5-11). If the current time is in the time period authorizing, an operation command issuing unit (not shown within Fig. 12; DHCTSE 627) issues a command to a decoding unit (Fig. 12, el. 1203 within DHCT 333) to decrypt control word 2235 (Col. 40, lines 5-38 and Col. 47, lines 5-30) stored in the memory (Col. 7, lines 4-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Admitted Prior Art with Pinder so protect transmitted information against unauthorized access (Col. 1, lines 40-45).

Admitted Prior Art in view of Pinder fail to shows a plurality independently operated decoding unit that arrange respectively to its corresponding plurality of independently operated Processing units 2008, 2010 and 2012.

Oka shows a plurality independently operated processing units (Fig. 1, el. 112, 114, 116 and 118) arranged respectively corresponding to the plurality of

independently operated decoding units 106, 107, 18 and 109. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Admitted prior Art in view of Pinder to have a plurality independently operated processing units arranged respectively corresponding to the plurality of independently operated decoding units, as taught by Oka, so to improve the performance of the system by selectively executing independent task on each independent decoder and processing unit.

Regarding claim 7, Admitted Prior Art (Fig. 1) discloses an information utilization apparatus comprising:

A memory 1002 configured to store a delivered piece of information including encoded data; A verification unit 2004 configured to verify whether the applicable (time) data included in the delivered piece of information in the memory has been authorized; A decoding unit 2006 configures to decode the encoded data stored in the memory 1002; A plurality of independently operated Processing unit 2008, 2010 and 2012 arranged respectively corresponding to said decoding unit 2006 and configured to execute different operations on the data decoded by the decoding unit 2006; A judging unit (within a verification unit 2004) configured to judge if the encoded data is authorized to be in response to a request for an operation; and an operation command issuing unit (within a verification unit 2004) configured to issue a command responding to a request for the operation to a decoding unit if the judging unit judges authorizes use of the encoded data

according to the verified applicable authorization data (Applicant's specification page 2, lines 18-page 4, lines 5).

Admitted Prior Art do not clearly disclose a delivered piece of information including applicable time data defining time period authorizing use of the encoded data in which the verification unit 2004 configured to verify whether the applicable time data included in the delivered piece of information in the memory has been falsified; the judging unit (within a verification unit 2004) configured to judge if a current time is in the time period of authorizing use of the encoded data according to the verified applicable time authorization data and an operation command reserving unit configured to prevent the issuance of a command responding to request for the operation until the time authorizing use of encoded data if the current time is judged by the judging unit not to be in the time period authorizing use of the encoded data.

Pinder discloses a memory (Fig. 13; Memory 1207, ROM 1219 and non-volatile memory "NVM" 1209 Col. 21, lines 60-Col. 22, lines 11 and Fig. 19; Col. 33, lines 40-45) stores a delivered piece of encoded data and applicable time data defining time period authorizing use of the encoded data; a verification unit (Fig. 1, element 119 and Fig. 3, DHCT) verifies whether the encoded broadcast signal with embedded time data has been altered/falsified within the Global Broadcast Authenticated Message "GBAM" Fig. 18-20 in which the GBAM are hashed by one-way hash function; (Col. 5, lines 54-56; Col. 9, lines 43-55; Col. 32, lines 60-Col. 33, lines 7 and lines 38-45; Col. 35, lines 28-45 and Col. 47, lines 8-60) and a judging unit (DHCTSE 627 within the DHCT Fig. 3,4, 6 element 333) judges if the current

time is in the time period authorizing use of the encoded data (Col. 33, lines 42-44 and Col. 40, lines 5-11). If the current time is in the time period authorizing, an operation command issuing unit (not shown within Fig. 12; DHCTSE 627) issues a command to a decoding unit (Fig. 12, el. 1203 within DHCT 333) to decrypt control word 2235 (Col. 40, lines 5-38 and Col. 47, lines 5-30) stored in the memory (Col. 7, lines 4-21). Pinder further discloses an operation command reserving unit (DHCTSE 627) configured to prevent the issuance of a command responding to request for the operation until the time authorizing use of encoded data if the current time is judged by the judging unit not to be in the time period authorizing use of the encoded data (Col. 39, lines 17-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Admitted Prior Art with Pinder so protect transmitted information against unauthorized access (Col. 1, lines 40-45).

Admitted Prior Art in view of Pinder fail to shows a plurality independently operated decoding unit that arrange respectively to its corresponding plurality of independently operated Processing units 2008, 2010 and 2012.

Oka shows a plurality independently operated processing units (Fig. 1, el. 112, 114, 116 and 118) arranged respectively corresponding to the plurality of independently operated decoding units 106, 107, 18 and 109. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Admitted prior Art in view of Pinder to have a plurality independently operated processing units arranged respectively corresponding to the plurality of

independently operated decoding units, as taught by Oka, so to improve the performance of the system by selectively executing independent task on each independent decoder and processing unit.

Regarding claim 10, an information access control method for use in an information utilization apparatus having a memory which stores a delivered piece of information including encoded data in which the method is analyzed with respect to claim 5.

Regarding claim 12, an information access control method for use in an information utilization apparatus having a memory which stores a delivered piece of information including encoded data in which the method is analyzed with respect to claim 7.

Regarding claim 15, a storage medium having program code instruction store thereon which perform information access control when executed by a processor in an information utilization apparatus having a memory which stores a delivered piece of information including encoded data is analyzed with respect to claim 5.

Regarding claim 17, a storage medium having program code instruction store thereon which perform information access control when executed by a processor in

an information utilization apparatus having a memory which stores a delivered piece of information including encoded data is analyzed with respect to claim 7.

2. Claims 6, 8, 11, 13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant 's Admitted Prior Art (Fig. 1; Specification page 2, lines 18-page 4, lines 5) in view of Pinder et al.(US 6,105,134).

Regarding claim 6, Admitted Prior Art (Fig. 1) discloses an information utilization apparatus comprising:

A memory 1002 configured to store a delivered piece of information including encoded data; A verification unit 2004 configured to verify whether the applicable data included in the delivered piece of information in the memory has been authorized; A decoding unit 2006 configures to decode the encoded data stored in the memory 1002; A plain data storage unit 2050 configured to store the data decoded by the decoding unit 2006; A plurality of independently operated Processing unit 2008, 2010 and 2012 configured to respectively execute different operations on the data decoded by the plain data storage unit 2050; A judging unit (within a verification unit 2004) configured to judge if the encoded data is authorized to be used in response to a request for an operation; and An operation command issuing unit (within a verification unit 2004) configured to issue a command responding to the request for the operation to the decoding unit 2006 and a corresponding one of the plurality of independently operated

processing units 2008, 2010, 2012 if the judging unit 2004 judges the authorization of using of the encoded data according to the verified applicable authorization data and the plain data storage does not store decoded data (Not authorize to decode; therefore, the user could not store the received encoded data), and to issue a command responding to the request for the operation to the corresponding one of the plurality of independently operated processing units if the encoded data is authorized to be used and the plain data storage unit 2050 stores the decoded data, whereby selectively enabling one of the plurality of independently operated processing units to execute the requested operation (Applicant's specification page 2, lines 18-page 4, lines 5).

Admitted Prior Art do not clearly disclose a delivered piece of information including applicable time data defining time period authorizing use of the encoded data in which the verification unit 2004 configured to verify whether the applicable time data included in the delivered piece of information in the memory has been falsified and the judging unit (within a verification unit 2004) configured to judge if a current time is in the time period of authorizing use of the encoded data according to the verified applicable time authorization data.

Pinder discloses a memory (Fig. 13; Memory 1207, ROM 1219 and non-volatile memory "NVM" 1209 Col. 21, lines 60-Col. 22, lines 11 and Fig. 19; Col. 33, lines 40-45) stores a delivered piece of encoded data and applicable time data defining

time period authorizing use of the encoded data; a verification unit (Fig. 1, element 119 and Fig. 3, DHCT) verifies whether the encoded broadcast signal with embedded time data has been altered/falsified within the Global Broadcast Authenticated Message "GBAM" Fig. 18-20 in which the GBAM are hashed by one-way hash function; (Col. 5, lines 54-56; Col. 9, lines 43-55; Col. 32, lines 60-Col. 33, lines 7 and lines 38-45; Col. 35, lines 28-45 and Col. 47, lines 8-60) and a judging unit (DHCTSE 627 within the DHCT Fig. 3,4, 6 element 333) judges if the current time is in the time period authorizing use of the encoded data (Col. 33, lines 42-44 and Col. 40, lines 5-11). If the current time is in the time period authorizing, an operation command issuing unit (not shown within Fig. 12; DHCTSE 627) issues a command to a decoding unit (Fig. 12, el. 1203 within DHCT 333) to decrypt control word 2235 (Col. 40, lines 5-38 and Col. 47, lines 5-30) stored in the memory (Col. 7, lines 4-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Admitted Prior Art with Pinder so protect transmitted information against unauthorized access (Col. 1, lines 40-45).

Regarding claim 8, Admitted Prior Art (Fig. 1) discloses an information utilization apparatus comprising:

A memory 1002 configured to store a delivered piece of information including encoded data; A verification unit 2004 configured to verify whether the applicable data included in the delivered piece of information in the memory has been authorized; A decoding unit 2006 configures to decode the encoded data stored

in the memory 1002; A plain data storage unit 2050 configured to store the data decoded by the decoding unit 2006; A plurality of independently operated Processing unit 2008, 2010 and 2012 configured to respectively execute different operations on the data decoded by the plain data storage unit 2050; A judging unit (within a verification unit 2004) configured to judge if the encoded data is authorized to be used in response to a request for an operation; and an operation command issuing unit (within a verification unit 2004) configured to issue a command responding to the request for the operation to the decoding unit 2006 and a corresponding one of the plurality of independently operated processing units 2008, 2010, 2012 if the judging unit 2004 judges the authorization of using of the encoded data according to the verified applicable authorization data and the plain data storage does not store decoded data (Not authorize to decode; therefore, the user could not store the received encoded data), and to issue a command responding to the request for the operation to the corresponding one of the plurality of independently operated processing units if the encoded data is authorized to be used and the plain data storage unit 2050 stores the decoded data, whereby selectively enabling one of the plurality of independently operated processing units to execute the requested operation (Applicant's specification page 2, lines 18-page 4, lines 5).

Admitted Prior Art do not clearly disclose a delivered piece of information including applicable time data defining time period authorizing use of the encoded

data in which the verification unit 2004 configured to verify whether the applicable time data included in the delivered piece of information in the memory has been falsified; the judging unit (within a verification unit 2004) configured to judge if a current time is in the time period of authorizing use of the encoded data according to the verified applicable time authorization data and an operation command reserving unit configured to prevent the issuance of a command responding to request for the operation until the time authorizing use of encoded data if the current time is judged by the judging unit not to be in the time period authorizing use of the encoded data.

Pinder discloses a memory (Fig. 13; Memory 1207, ROM 1219 and non-volatile memory "NVM" 1209 Col. 21, lines 60-Col. 22, lines 11 and Fig. 19; Col. 33, lines 40-45) stores a delivered piece of encoded data and applicable time data defining time period authorizing use of the encoded data; a verification unit (Fig. 1, element 119 and Fig. 3, DHCT) verifies whether the encoded broadcast signal with embedded time data has been altered/falsified within the Global Broadcast Authenticated Message "GBAM" Fig. 18-20 in which the GBAM are hashed by one-way hash function; (Col. 5, lines 54-56; Col. 9, lines 43-55; Col. 32, lines 60-Col. 33, lines 7 and lines 38-45; Col. 35, lines 28-45 and Col. 47, lines 8-60) and a judging unit (DHCTSE 627 within the DHCT Fig. 3,4, 6 element 333) judges if the current time is in the time period authorizing use of the encoded data (Col. 33, lines 42-44 and Col. 40, lines 5-11). If the current time is in the time period authorizing, an operation command issuing unit (not shown within Fig. 12; DHCTSE 627) issues a command to a decoding unit (Fig. 12, el. 1203 within DHCT 333) to decrypt control

word 2235 (Col. 40, lines 5-38 and Col. 47, lines 5-30) stored in the memory (Col. 7, lines 4-21). Pinder further discloses an operation command reserving unit (DHCTSE 627) configured to prevent the issuance of a command responding to request for the operation until the time authorizing use of encoded data if the current time is judged by the judging unit not to be in the time period authorizing use of the encoded data (Col. 39, lines 17-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Admitted Prior Art with Pinder so protect transmitted information against unauthorized access (Col. 1, lines 40-45).

Regarding claim 11, an information access control method for use in an information utilization apparatus having a memory which stores a delivered piece of information including encoded data in which the method is analyzed with respect to claim 6.

Regarding claim 13, an information access control method for use in an information utilization apparatus having a memory which stores a delivered piece of information including encoded data in which the method is analyzed with respect to claim 8.

Regarding claim 16, a storage medium having program code instruction store thereon which perform information access control when executed by a processor in

an information utilization apparatus having a memory which stores a delivered piece of information including encoded data is analyzed with respect to claim 6.

Regarding claim 18, a storage medium having program code instruction store thereon which perform information access control when executed by a processor in an information utilization apparatus having a memory which stores a delivered piece of information including encoded data is analyzed with respect to claim 8.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is 703-308-7372. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht
04/15/2004

HAI TRAN
PATENT EXAMINER